

Source	Uncertainty [%]
Experimental uncertainties	
Integrated luminosity	1.9
b tagging efficiency	1.6
Trigger efficiency	1.2
Pileup reweighting	1.0
L1 inefficiency	0.7
Jet energy scale	0.6
Jet energy resolution	0.4
Lepton selection efficiency	0.4
Background uncertainties	
$t\bar{t}H$ normalization	2.6
Charge misidentification	1.6
Nonprompt leptons	1.3
VVV normalization	1.2
$t\bar{t}VV$ normalization	1.2
Conversions normalization	0.7
$t\bar{t}\gamma$ normalization	0.6
ZZ normalization	0.6
Other normalizations	0.5
$t\bar{t}Z$ normalization	0.3
WZ normalization	0.2
tZq normalization	0.2
tHq normalization	0.2
Modeling uncertainties	
$t\bar{t}W$ scale	1.8
$t\bar{t}W$ color reconnection	1.0
ISR & FSR scale for $t\bar{t}W$	0.8
$t\bar{t}\gamma$ scale	0.4
VVV scale	0.3
$t\bar{t}H$ scale	0.2
Conversions	0.2
Simulation statistical uncertainty	1.8
Total systematic uncertainty	5.8